RECYCLED WATER CASE STUDY

Lomas Santa Fe Country Club



Jomas Santa Fe Country Club is a private country club located in Solana Beach. The club is managed by American Golf Corporation and Golf Course Superintendent John Baasch. Mr. Baasch has worked at Lomas Santa Fe for the past year, and has extensive experience working with recycled water at both La Costa and Aviara.

Amenities at Lomas Santa Fe include an 18 hole par 72 Billy Bell-designed championship golf course that has been irrigated with recycled water for the past ten years. The tees, fairways and rough are irrigated with recycled water; greens, adjacent banks and area surrounding the clubhouse are irrigated with potable water. The total irrigated area is approximately 100 acres; less than 5 of those acres use potable water.

Lomas Santa Fe Country Club receives its recycled water from the San Elijo Water Reclamation Facility which is owned by the San Elijo Joint Powers Authority through the Santa Fe Irrigation District, the water purveyor. Relations with Santa Fe Irrigation and San Elijo have been very positive and they are helpful when issues arise, according to Baasch.

The Connection Process

The entire golf course has a dual pipe system, although the only potable water used is on the greens. There are backflow preventors installed on both the potable and recycled water systems. These devices, which are designed to stop any mixing of recycled water with potable, are consistently tested per regulations. Irrigation is conducted at night between 8 pm and 5 am and is computer controlled. Cross connection checks are completed every four years. Signage is located at all points of entry and at all on-site lakes, which are

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supplied with recycled water. There are also recycled water signs posted near the 1st and 10th tees.

Landscape Irrigation Management Practices

Grass species used on the greens are a poa annua and bentgrass. The tees are a hybrid bermuda base that is overseeded with ryegrass. The fairways are strictly bermuda and not overseeded. The rough areas are bermuda overseeded with ryegrass. The soil is a clay loam that is not very porous and has a hard surface. Based on a NRCS Soil Survey, roughly 40% of the irrigated area is Corralitos loamy sand and about 50% is Loamy alluvial land-Huerhuero complex, typical of coastal San Diego soils. Baasch plans to eventually replace existing landscape with drought tolerant plants. Landscape management includes continual evaluation of drainage, soil, and levels of nutrients needed to keep the course and landscape green and healthy. "Landscape management and maintaining a beautiful course is central to my job responsibilities," states Baasch. "Recycled water helps us maintain that beauty while we conserve."

Superintendent Baasch leaches greens with potable water during the summer as needed. All leaching is done by hand. He also regularly aerates the tees, fairways, and roughs with recycled water and is constantly looking for leaks and tracking usage of both water sources in his vigilant efforts to conserve water for the club.

The irrigation system consists of low flow sprinkler heads. Higher nitrogen levels in the recycled water have helped decrease the amount of fertilizer needed.

Water Quality Issues

In general, using recycled water is "business as usual" at the Club. The only problem that Superintendent John Baasch has encountered is occasional plant burn due to chlorine. Irrigation practices described previously compensate for higher TDS levels.

Water Costs

Lomas Santa Fe pays \$2.89 per unit for potable water and \$2.60 for recycled, resulting in a discounted rate of nearly 10%. They use approximately 280 acre feet of recycled and about 40 acre feet of potable per year. There is concern about upcoming rate increases; however, considering that use of potable water will be limited, they feel that consistently available, lower cost recycled water was well worth the retrofit investment.

Public/Customer Perception Issues

According to John Baasch, recycled water is accepted by the members of the country club, and he has not encountered any opposition to its use. In general, he says, "The superintendents for the golf courses in the region are well informed on recycled

water and understand the importance of its use. If they are not currently using recycled water it is typically because they are in an area where it is not available, or they have access to well water. The other issue to course superintendents is the variation in the water quality of recycled water across the county since there are so many different retailers and treatment facilities." His employer, American Golf Company, is well aware of water issues around the state, and they work diligently to support conservation and the use of recycled water.

On a final note, Baasch would like the public to know that golf course superintendents are stewards of the environment and are uniformly concerned about conserving water. "Having recycled water available is a boon to our industry; however, we are careful users of all water resources."

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